KS98-2

MULTI-FUNCTION CONTROLLER

PRODUCT BROCHURE

Gems™ Sensors & Controls

Overview

AUTOMATION MADE EASY

Gems' multi-function instrument KS98-2 combines PID control, process monitoring, sequence control, data logging and alarms.

Function blocks from an extensive library can be used to build an application by easily selecting and connecting the blocks graphically using the "ET/KS98"-utility. This method is ideal for creating tailored control, including user interface pages with minimal effort. As a complete solution in a single unit, the KS98-2 multi-function instrument helps to reduce programming, installation cost and control cabinet space.

- Modular automation system in a 1/4-DIN (96 x 96mm) format
- Measure, control, calculate, and record
- Process visualization, operation, alarm and alerts
- Comprehensive application-oriented functionality
- Graphical programming utility and simulator
- 3.5 " color touch-screen display
- USB interface on front fascia
- Expandable with modular inputs and outputs
- Ethernet and common fieldbuses

HARDWARE FLEXIBILITY

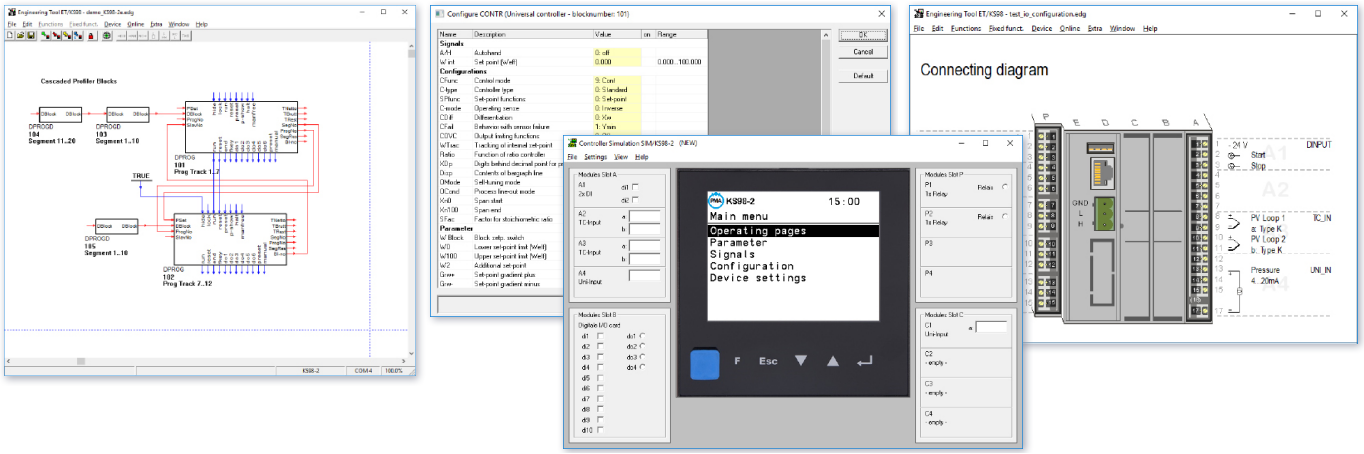
KS98-2 offers comprehensive modular input and output options to adapt the unit to the application needs. The unit is optimized to handle the precise measurements required in the process industry via I/O modules supporting a variety of sensor types and also have galvanic isolation. Additional signal conditioners and isolating amplifiers are not necessary in most applications, saving cost and less installation time.

- Unprecedented number of I/O in a 1/4-DIN device
- Fully adaptable with up to 12 internal I/O-modules
- Almost every 1/4 DIN Controller can be replaced/upgraded

EASY CREATION OF APPLICATIONS FOR SIMPLE AND COMPLEX TASKS

To program the multi-function instrument KS98-2 for a specific application, the easy to use graphical engineering utility ET/KS98 is available. A variety of proven function blocks for control, sequencing and calculations can be easily selected and combined as needed for the application. A computer simulation helps to validate and improve the user program in the office before commissioning for live factory equipment.

By selecting functions from the library, the corresponding user screens for operation and setup are added to the user program automatically. Specific overview pages can be built and added to the application.



Features

PROGRAMMABLE FUNCTIONALITY

- Freely programmable based on a proven library of functions
- Control, sequencing, computation, logging
- All you need in a single 1/4-DIN instrument
- Reliable sophisticated control strategies proven in many applications available from our function block library

CUSTOMIZABLE APPEARANCE

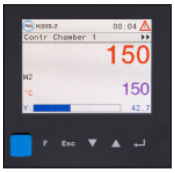
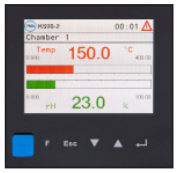
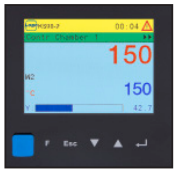
- Splash screen
- Customer logo
- Multiple color sets with
  - Foreground colors
  - Background colors
  - Colors of important values

EASY TO MAINTAIN

- Via front accessible USB
- Via network access
- Using a USB flash drive

APPLICATIONS

- Multi loop control
- Sophisticated process control
- Profile control
- Complete automation of small applications


Specifications

DISPLAY	320x240 Pixel Color TFT Display
OPERATION	Touch with dedicated virtual buttons below the viewing area
MECHANICS	¼-DIN panel mount; mounting depth 118mm
IP RATING	IP65 (Front)
INPUTS	Universal analog input and 2 digital inputs; Modular expandable for various types of input signals (TC, RTD, mA, mV/V, 2-wire transmitters, zirconia probes, 24V logic); (Unit can support up to 12 dual channel I/O extension modules)
OUTPUTS	2 or 4 Relays; Modular expandable with various types of output signals (mA, V, SSR, 24V logic); (Unit can support up to 12 dual channel I/O extension modules)
COMMUNICATION	Ethernet, USB, CAN. Optional modules for RS485, Profibus, Profinet
DATA STORAGE	SD card
FUNCTION LIBRARY & USER PROGRAM	Logic, Math, Control, Profiling, Alarming, Recording, … User program can combine up to 2000 function blocks and manage up to 30 control loops

Ordering Information

KS98-2 BASIC UNIT

KS98 - 2 - [X][X] - [X][X][X][X][X] - [X] 0 0

BASE MODELS	POWER SUPPLY & OUTPUTS [P]	COMM. OPTIONS [D]	OPTIONS	I/O EXTENSIONS [B]	I/O EXTENSIONS [C]	CONFIGURATION	CERTIFICATION
0 - Fast-On Terminals	0 - 90-250V (2 Relays, 2 Option Module Slots)	0 - None (For Standalone Applications)	0 - None	0 - Not Fitted	0 - Not Fitted	0 - Default Settings; No Option Modules Installed	0 - Standard (CE-Certified)
1 - Screw Terminals	1 - 24V UC (2 Relays, 2 Option Slots)	1 - Standard Interfaces (Ethernet/ USB) & CAN for Remote I/O	1 - Datalogger	1 - Digital I/O Extension (10 DI, 4 DO)	1 - Digital I/O Extension (10 DI, 4 DO)	1 - Default Settings; Option Modules According to Additional Order Line	U - UL / cUL Certified
	2 - 90-250V (4 Relays)	2 - Standard Interfaces w/ RS485 / MODBUS		2 - Modular Extension (4 Option Module Slots)	2 - Modular Extension (4 Option Module Slots)	8 - Preset to Specification; No Option Modules Installed	D - DIN3440 / EN 14597
	3 - 24V UC (4 Relays)	3 - Standard Interfaces w/ Profibus				9 - Preset to Specification; Option Modules According to Additional Order Line	
		4 - Standard Interfaces w/ Profinet					

FACTORY-INSTALLED OPTION MODULES

Into KS98-2 in order line above.

A98 -	F	-	0	0	0	0	0	0	0	0	0	0	0	0
	FACTORY-INSTALLED		STRIP P / SEG. 3	STRIP P / SEG. 4	STRIP A / SEG. 2	STRIP A / SEG. 3	STRIP B / SEG. 1	STRIP B / SEG. 2	STRIP B / SEG. 3	STRIP B / SEG. 4	STRIP C / SEG. 1	STRIP C / SEG. 2	STRIP C / SEG. 3	STRIP C / SEG. 4

MODULES & POSITIONS			
0 0 0 0	0 0 0 0	0 0 0 0	Not Fitted
- - U U	U U U U	U U U U	Universal Input
- - R R	R R R R	R R R R	Dual Pt100/1000, NI100/1000, Resistance
- - T T	T T T T	T T T T	Dual Thermocouple, mV, 0/4-20mA
- - V V	V V V V	V V V V	Dual -50 to 1500mV (eg. Zirconia Probe), 0 to 10V
- - P P	P P P P	P P P P	0/4 to 20mA Input w/ Transmitter Power Supply
A A A A	A A A A	A A A A	Dual DC Drive Output For SSR
L L L L	L L L L	L L L L	Dual Linear Out (mA/V DC)
B B B B	B B B B	B B B B	Dual Bipolar Linear Out (-10 to 10V)
- - D D	D D D D	D D D D	Dual Digital I/O

Please indicate for all option module slots (12 digits).

SEPARATE MODULE ORDERS

A98 -	M	-	U

AVAILABLE MODULES	
U	Universal Input
R	Dual Pt100/1000, NI100/1000, Resistance
T	Dual Thermocouple, mV, 0/4-20mA
V	Dual -50 to 1500mV (eg. Zirconia Probe), 0 to 10V
P	0/4 to 20mA Input w/ Transmitter Power Supply
A	Dual DC Drive Output For SSR
L	Dual Linear Out (mA/V DC)
B	Dual Bipolar Linear Out (-10 to 10V)
D	Dual Digital I/O

Gems™ Sensors & Controls

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